

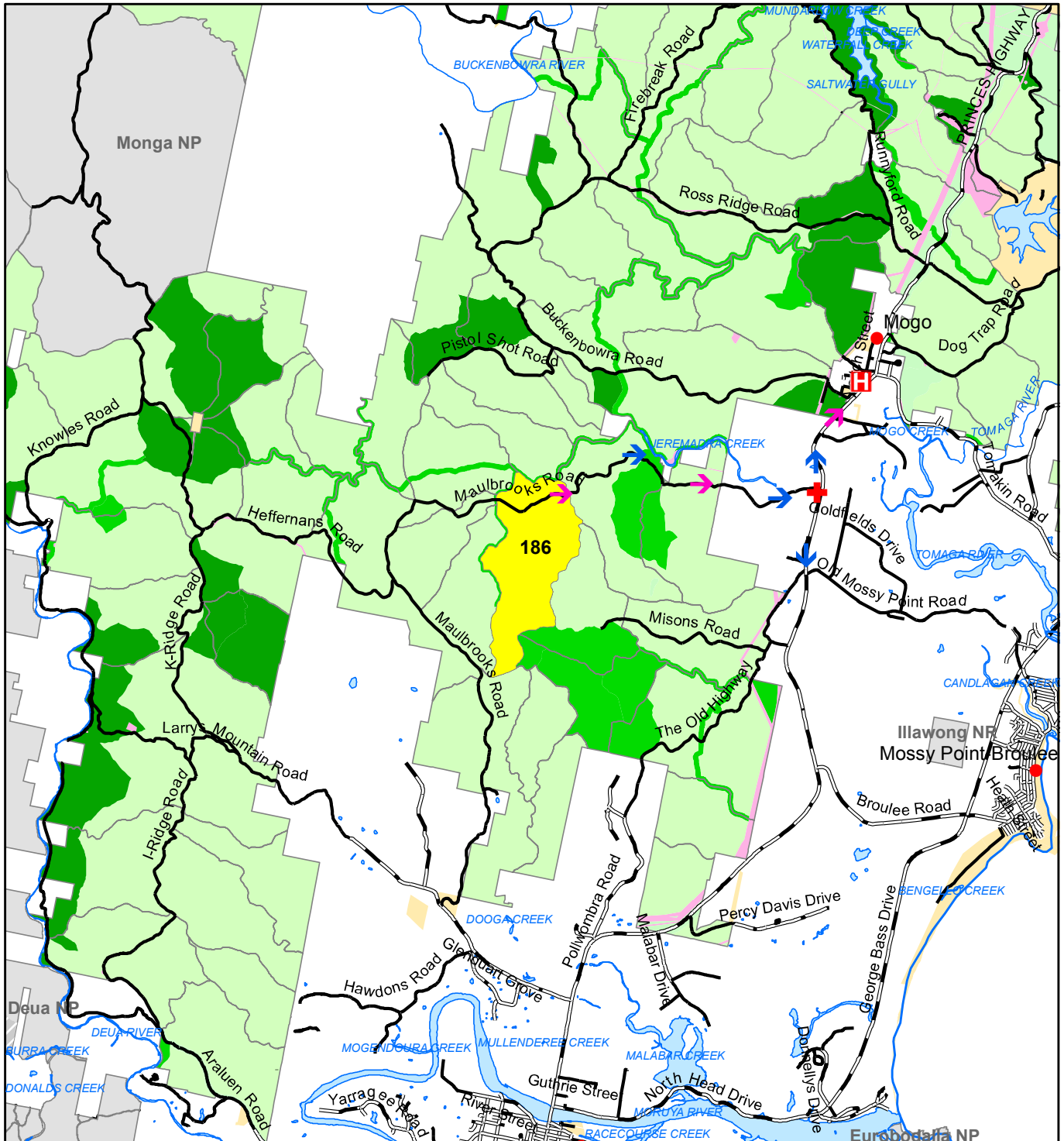
LOCALITY MAP

Compartment 186

State Forest: Mogo No: 549

Southern IFOA - BATEMANS BAY MANAGEMENT AREA

Scale: 1:100,000



- | | | | |
|-----------------------|-------------------|------------------|---------------------------|
| ● Towns & Localities | State Forest | National Parks | ✚ Emergency Meeting Point |
| == Sealed Road | Planning Unit | Formal Reserve | H Helicopter Landing Site |
| == Major Forest Road | Vacant Crown Land | Informal Reserve | ➡ Evacuation Route |
| - - Minor Forest Road | Non Forest | Water | ➡ Haulage Route |
| — Major Rivers | Freehold | | |

Prepared By: Mark Jones

Version: 1

PLANNING SUPERVISOR APPROVAL

APPROVED: LEE BLESSINGTON

DATE: 29 / 09 / 2015

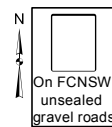
Harvest Plan Operational Map

Compartment: 186

State Forest: MOGO No: 549

Southern IFOA - South Coast

Map Sheet: MOGO 8926-3N



LEGEND 1 FAUNA FEATURES

- Sooty Owl
- Powerful Owl
- Masked Owl
- Yellow-bellied Glider
- Yellow-bellied Glider (Feed Tree)
- Yellow-bellied Glider (Heard)
- Glossy Black-Cockatoo
- Glossy Black-Cockatoo (Feed Tree)
- Gang-gang Cockatoo
- Swift Parrot
- Little Lorikeet
- Grey-headed Flying-fox

LEGEND 2 SAFETY ALERT FEATURE

- Safety Alert Point

BOUNDARIES

- Compartment Boundary

ROADS & TRACKS

- Major Forest
- Minor Forest
- EPL Standard Existing (Major)
- EPL Standard Existing (Minor)
- Mountain Bike Track (4m Total Width)
- Proposed Control Line

DUMPS & CROSSINGS

- Temporary Dry Weather
- New Crossing
- Existing Crossing

HARVEST AREA

- FMZ 4 - RU1-ST5 Heavy - 194 Ha
- FMZ 4 - RU2-No Harvesting - 53.9 Ha

NON HARVEST AREA

- Rocky Terrain Area
- Harvesting Protection (FMZ 3A)
- Owl Landscape
- Probable Rock & Exclusion Zone (20m)
- Ridge & Headwater Habitat (40m & 80m Total Width)

DRAINAGE

- Mapped LIC Drainage

Scale: 1:15,000
Contour Interval 10m

STREAM EXCLUSION ZONES (EPL IHL 1/2 & TSL)

Feature	Filter Strip	Protection Zone	Operational Zone
Unmapped	N/A	N/A	N/A
1st Order	5m	5m	10m
2nd order	5m	15m	10m
3rd order	5m	25m	10m
4th order	5m	45m	10m

0 125 250 500 750 1,000
Meters

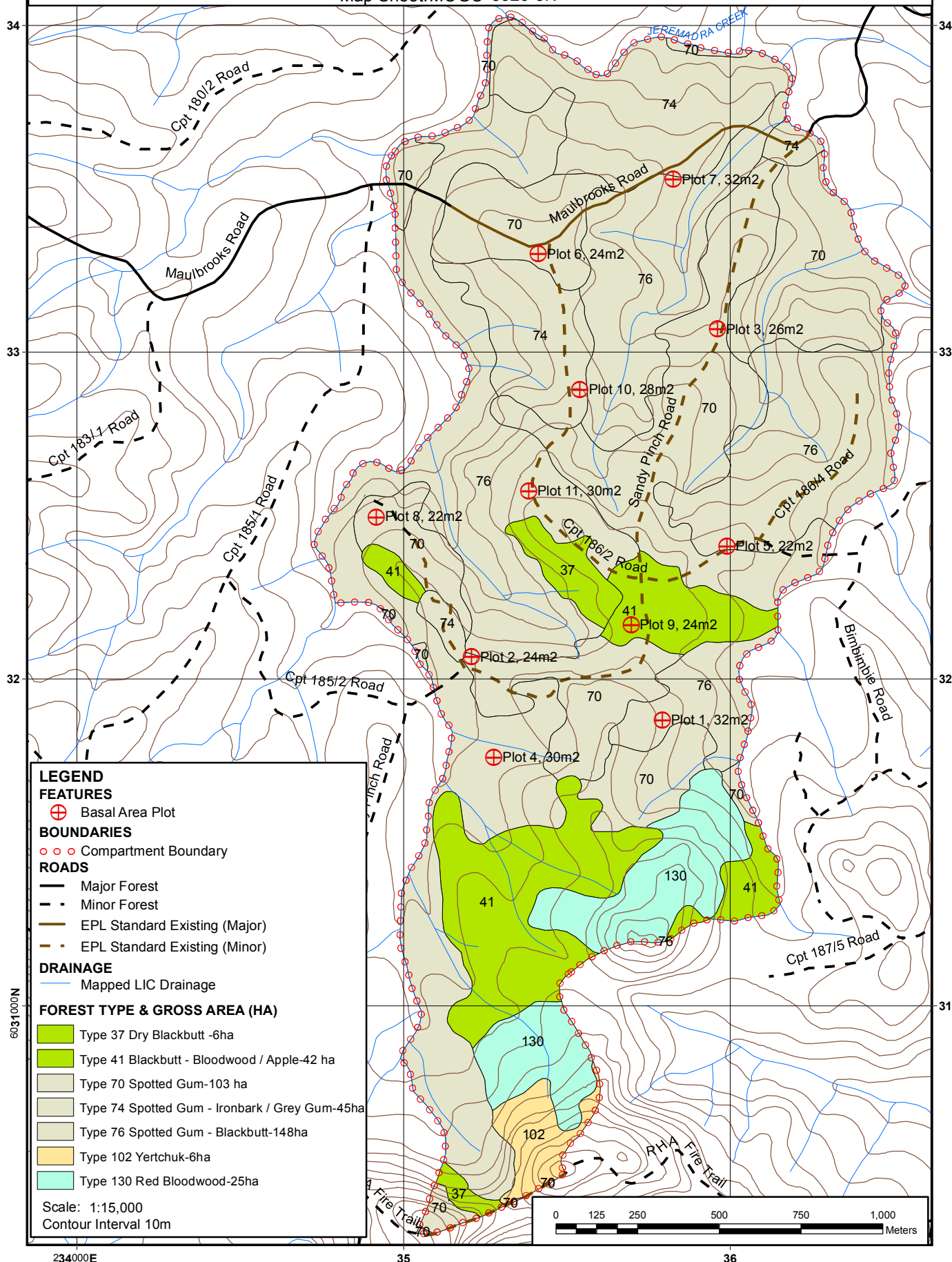
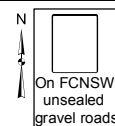
Prepared By: Mark Jones
Version: 1

Harvest Plan Forest Type Map

Compartment: 186

State Forest: MOGO No: 549

Southern IFOA - South Coast
Map Sheet: MOGO 8926-3N





HARDWOOD FORESTS- SOUTHERN IFOA SOUTH COAST HARVESTING PLAN

Mogo State Forest – Compartment 186

Certification

This plan has been prepared in accordance with the Integrated Forestry Operations Approval issued under the Forestry and National Park Estate Act 1998. The Harvest Plan Standard Conditions for Hardwood Forest Operations in South Coast apply to this operation.

Prepared By: Harvest Planner	Mark Jones	Approved By: Planning Supervisor	Lee Blessington
Signature	Mark Jones	Signature	Lee Blessington
Date	29/09/2015	Date	29/09/2015

Note: Approval includes the Harvest Plan Operational Map (HPOM) with the corresponding approval date displayed on the map, verifying final approved version. Other maps included with this plan are Locality and Forest Type maps.

Description of Proposal

Harvesting of Hardwood forest

Harvesting of Hardwood forest using Single Tree Selection Silviculture subject to the Southern IFOA requirements will be undertaken within this planning unit. **Timber harvesting and road construction will not be licensed under the EPL.**

The primary product of the harvesting is high quality large sawlogs (quota logs), small high quality sawlogs, veneer logs, girders, poles & piles where timber markets are available. Parts of felled logs that do not meet high quality log specifications are segregated and graded into other classifications such as salvage sawlogs, pulp logs & miscellaneous timbers e.g. split & round posts, firewood, mining timbers & craftwood. The availability of miscellaneous timbers depends mainly on forest types, log defectiveness & market conditions at the time of harvesting.

Clause 22 – Integrated Forestry Operations Approval (IFOA) Consideration

All relevant factors have been reviewed taking into account the volume and monetary value of each forest product to supply Term Agreement Holders. The harvesting operation also complies with Clause 22 of the IFOA.

Attachment 1: Site Safety Plan prescribes safety requirements and Medical Emergency Evacuation Plan for this harvesting operation.

Attachment 2: Roading plan prescribes roading requirements for this harvesting operation.

Abbreviations used in this plan

FT = Forest Technician, HC= Harvesting Coordinator, PtS= Protection Supervisor, HS = Harvesting Supervisor, RC = Roading Coordinator, IFOA = Integrated Forestry Operations Approval.

Area Identification and Yield Estimates

State Forest	Compartment/s	IFOA Region	Management Area	Certification
Mogo	186	Southern	Batemans Bay	AS4708:2007 ISO 14001

	Cpt 186
Plan Compartment ID	22182
Gross Area (ha)	375
Net Harvestable Area (ha)	248
Harvest Area (ha)	194
Poles, Piles, Veneer & Girders	27m ³
Quota Logs (HQL)	3000m ³
High Quality Small	500m ³
Salvage	1500m ³
Pulp E1	3000t
Firewood/Misc	1000t

Note: The yield estimates in the table above are derived from the Plan of Operations.

Slope Classes (percent of harvest area)

	Cpt 186
Slope Class	% of harvest area
0-20°	100
20-25 °	0
25-30 °	0



ATTACHMENT 1: SITE SAFETY PLAN

Worksite Information	
Is this Declared Hunting Area: Yes	Comments: Hunting exclusion zone in place
Have Exclusion Zone signs been erected or checked prior to starting work daily.	NA
Comments:	
Description of Work to be undertaken on site: - Refer to description of proposal above.	
Site Supervisor	
Name:	Contact number:
Communication	
Radio channel number	VHF: UHF
Other (e.g. hand signals):	
Traffic management (describe) e.g. Signage, Road closure, Traffic control	
<p>This plan identifies haulage from the compartment will be east via Maulbrooks Road (FCNSW owned becoming Shire owned where State Forests ends), then turning left or right onto the Princes Highway (100km/hr RMS controlled road)</p> <p>Road intersections outside the control of FCNSW are not covered by this plan or any FCNSW Traffic Control Plan. Haulage contractors must abide by NSW road laws and standard operating procedures in relation to haulage routes outside the control of FCNSW.</p> <p>Dust and noise – Where log haulage routes pass close to rural housing along natural surface/gravel roads dust and noise must be minimised to the greatest extent practicable. Trucks should reduce speed, restrict use to daylight hours and minimise the use of engine brakes through these areas.</p>	
Name of on-site safety first aider/s	
Location of first aid kit	

SITE HAZARD & RISK ASSESSMENT NO.	CONTROL	WHO	IMPLEMENTED
1. Vehicle collision at adjoining roads of various traffic levels	Warning signs at FCNSW intersections, road closure on FCNSW roads. Implement Traffic Control plans (where specified in this harvest plan). 60km/hr speed limit on all State Forest gravel roads unless otherwise signposted. Compliance with FCNSW lights on policy.		
2. Mine shafts/quarries	Compartment 186 has been assessed as a potential mine shaft area. Assess snig track routes and tree felling paths prior to operating. Identify and mark site accordingly.		
3. Hazardous or dead trees	Refer to FCNSW WHS procedure 4.26. Assess area within two tree lengths of work site. Assess risk, mark any Distinctly Dangerous Trees with the symbol Ø & if necessary remove hazard or move work site. Use machinery to assist with hazard removal if possible Contractor is responsible for implementing control strategies during harvesting. Note: two dangerous trees and two trees with hung-up limbs have been identified on the HPOM. Adjacent trees have been marked in the field with orange flagging tape.		
4. Overhead hazards associated with dumps	Refer to FCNSW WHS procedure 4.26. Assess overhead hazard within two tree lengths of the dump. Assess risk, & if necessary remove hazard or relocate dump site. Contractor is responsible for implementing control strategies during harvesting.		
5. Dust from passing vehicles along dirt haulage routes	Restrict speed to minimise dust generation, slow down when passing vehicles. Turn on driving and hazard lights to increase visibility.		
6.			
7.			

- **All** visitors, contractors and employees **must** be fully **inducted** onto the worksite by the workplace supervisor e.g. the Principal Contractor or the Forestry Corporation supervisor. This must be recorded on the attached induction sheet.
- Relevant **Safe Work Procedures** are available and understood for the type of work to be undertaken.
- A **Risk and Hazard Assessment Worksheet** must be completed if site specific hazards are identified that are not covered by a **Safe Work Procedure**. The top (pink sheet) is to be attached to this site safety plan.
- Operators in training must be supervised by the site supervisor.
- All appropriate Personal Protective Equipment (PPE) must be worn on the worksite at all times



MEDICAL EMERGENCY EVACUATION PLAN

Nearest reliable mobile phone reception (describe location)			
Next G Network: Good	GSM: N/A	Satellite: N/A	
GPS Lat/Long: -35° 48' 30.40" / 150° 4' 19.78"	MGA: 235448E 6033341N	Datum: GDA 94	Zone: 56
Location description: Intersection of Maulbrooks Road and Cpt 186/2 Road			
Emergency meeting point for ambulance / police (refer to attached locality map)			
GPS Lat/Long: -35° 48' 11.78" / 150° 7' 54.94"	MGA: 240833E 6034074N	Datum: GDA 94	Zone: 56
Location description: Intersection of Maulbrooks Road and Princes Hwy.			
Helicopter landing place (refer to attached locality map)			
GPS Lat/Long: 35° 47' 14" S 150° 08' 11" E			
Location description: Mogo Football ground.			
Procedures to obtain ambulance assistance			
<ol style="list-style-type: none"> 1. Dial 000 2. If there is no mobile coverage, dial 112 (which will work on any mobile phone system). 3. If no response on 112: <ul style="list-style-type: none"> • use a radio link (TARA, be discrete with personal information) • move to an area with mobile coverage • find a landline • use another network (e.g. a contractor's VHF radio) 		<p>Contact nearest Forestry Corporation office on:</p> <p>Channel: 236</p> <p>Telephone: 1300 880 548</p> <p>Give details of the situation and ask for a 000 call to be placed.</p>	
000 operator question:		Response:	
1. Police, Fire, Ambulance?		NSW Ambulance,	
2. Suburb?		State Forest name: Mogo Nearest town or locality: Mogo Nearest ambulance station: Batemans Bay	
3. Address?		Maulbrooks Road	
4. Nearest road junction/cross street?		Maulbrooks Road and Princes Highway	
5. Local government area?		Eurobodalla	
6. Nature of the problem?		Describe the accident, number and condition of casualties	
7. Where is the accident?		Refer to safety meeting point above	
Directions to navigate from nearest ambulance station to the emergency meeting point. From Batemans Bay head south on the Princes Highway travel approx. 24km to intersection with Maulbrooks Road (on right).			
8. 4WD ambulance required?		CB radio channel to use:	
9. Injuries?		Give detailed information about the condition of the casualty (do not mention names over radio system)	
10. Your name and call back number:			

Silviculture and Harvesting Prescriptions

Year	1964	1966	1979	1980	1987	1993	1994	1995	2005	2009	2012	2013
TSI	X	X	X	X	X	X	X	X	X	X	X	X
HR Burning	X	X	√	X	√	√	√	√	√	√	√	√
Wildfires	√	√	X	√	√	X	X	X	X	√	X	X
Logging m ³	0	0	0	0	0	0	0	0	0	10212	0	0

√ - applies, X – not applicable

Compartment	Resource Unit	No. of Sweeps	BA Average (m ² /ha)	BA Range (m ² /ha)
186	1	11	27	22 – 32
186	2	NA	NA – no harvesting	NA – no Harvesting

Silvicultural Planning

Single Tree Selection

The STS tract (RU1 – 194 ha) is a predominantly mixed aged mature forest and will be harvested under a heavy single tree selection (STS) regime. The objective within the 194 ha harvest area for this operation (resource unit 1) is to remove 45% of the basal area to create canopy openings for regeneration, whilst retaining and minimising damage to young regenerating stems, seed trees, habitat and recruitment trees.

It is envisaged that the next harvesting operation in this compartment would be on average 30 years time.

The STS tract for IFOA purposes includes resource unit 1 of compartment 186 as indicated on the HPOM.

Single Tree Selection (STS) must remove no more than 45% of the basal area (BA), while retaining a minimum BA of 10m² per hectare within the tract.

Resource Unit (Refer to HPOM for detail)	Species Composition	Stand Structure and Condition
1	Overstorey dominated by spotted gum (<i>Corymbia maculata</i>), blackbutt (<i>Eucalyptus pilularis</i>), grey ironbark (<i>E. paniculata</i>) and red bloodwood (<i>C. gummiifera</i>).	Mature to over mature predominantly mixed age stand. Stand has reached endpoint with limited further growth potential.
2	Dominated by regrowth blackbutt (<i>E. pilularis</i>) and spotted gum (<i>C. maculata</i>)	Good quality stand regenerating post 2009 Australian Group Selection (AGS) harvest event. DBHOB 2-15cm.

Harvesting Prescription

Resource Unit (Refer to HPOM for detail)	% of Harvest Area	Silvicultural Treatment
1	100%	<p>STS heavy:</p> <ul style="list-style-type: none"> Retain and protect from harvesting/fire damage: <ul style="list-style-type: none"> -poles/advanced growth (<40cm DBHOB) with good form and vigour, -habitat and recruitment trees as per TSL, Retained trees should be evenly spaced throughout the resource unit. Ensure no more than 45% of the BA within the resource unit is removed, while retaining a minimum BA of 10m² per hectare within the tract. All other products should be removed markets permitting. If this objective cannot be achieved the following options should be considered: <ul style="list-style-type: none"> -reject tree felling (HC must first obtain approval from HS), -defer harvesting until ideal market conditions prevail, -consider harvesting under a light or medium STS regime
2	0%	<ul style="list-style-type: none"> All regenerating areas from the 2009 AGS harvesting event are to be excluded from harvesting. BA in these areas does not contribute to the BA retention. Directional falling techniques must be utilised around AGS areas to avoid damage to tree regeneration. Where possible, do not snig through tree regeneration areas. If it is impractical to snig around these areas, snigging through is permitted providing: i) existing snig tracks are used; and ii) damage to regeneration is minimised.

Note: The area of each silvicultural treatment must be mapped and recorded in the Post logging information section of this plan.

Special Requirements**Mountain Bike Track**

Parts of the Maulbrooks Mountain Bike Track exist within compartment 186 at areas identified on the HPOM. A buffer of 2m either side of the track (4m total width) has been marked in the field with fluorescent orange marking tape. During the course of the harvesting operation, trees may be felled from within the track buffer. However, the harvesting contractor must make all reasonable and practical attempts to minimise mechanical disturbance and debris accumulation within the track buffer. To facilitate this, designated track crossing points should be identified by the harvesting contractor at suitable locations prior to commencement of harvesting.

Noxious Weeds/Disease/Pests Hygiene Requirements

Compartment 186 is within Eurobodalla Shire Council which is a designated red zone for Myrtle Rust. In order to prevent the spread of Myrtle Rust all harvesting machinery, equipment and vehicles heading west from Eurobodalla Shire Council or south into Victoria must be inspected for vegetation containing Myrtle Rust. If present, the vegetation must be removed from the harvesting machinery, equipment or vehicle prior to leaving the compartment.

Permanent Growth and Research Plots

Any inventory plots located during the harvesting operation are to be treated the same as the surrounding area.

Road Works

Within the compartment boundary, only roads that are shown on the HPOM as EPL standard may be used for haulage.

Apiary Sites

6 apiary sites provided in the table below are located within the planning unit. Contact details are available from the Batemans Bay office.

Name	Site Number	Contact number	Pre burn notification complete?
	16.08, 16.09, 17.08, 17.09		
	16.07, 17.07		

- The HC must provide the apiary permittees with at least two weeks advance notice when bee boxes need to be removed or relocated.

Rocky Terrain

- Probable rock and exclusion zones shown on the HPOM were preliminarily assessed at the planning stage and are likely to meet the definition of a rocky outcrop or cliff. These areas will need to be excluded as per TSL requirement.
- Rocky terrain areas have also been identified on the HPOM. Rocky terrain areas will need to be field verified by the FT to determine if they meet the definition of a rocky outcrop or cliff. Any areas meeting the definition of a rocky outcrop or cliff will need to be excluded as per TSL requirements.
- FT/HC will continue to conduct on the ground mark-up and searches and report back to Planner/Field Ecologist any feature requiring further investigation.

Forest Management Zoning

FMZ 3A Harvesting Excluded and FMZ 4- General Management (normal harvesting prescriptions apply) occur within the compartment. Refer to HPOM for more detail.

FMZ 3A -- Logging operations are restricted as per condition 18(b) of the IFOA. Refer to Harvest Plan Standard Conditions for Hardwood Forest Operations in South Coast for detail of what logging operations are permitted in this zone.

FMZ 3A – Prescribed burning is only permitted in these areas where fire does not conflict with underlying protection zones e.g. rainforest, cultural heritage etc. (Refer to cultural heritage flora and fauna sections of this plan and the standard harvest plan conditions for more detail).

IFOA Required Approval of Forestry Activities

Approvals have not been obtained for snig track construction and/or use, road construction, road re-opening, routine road maintenance and log haulage in FMZ 3A. If the HC identifies the need for harvesting related activities to occur within FMZ 3A during the operation, the Planner must be contacted to seek Planning Supervisor approval.

Construction or re-opening of roads or snig tracks may occur with prior approval in the following exclusion zone:

- Planning Supervisor approval required for Stream Exclusion Zones.

During the harvesting operation the HC must identify any crossings required in these exclusion zones and contact the Planner to obtain required approvals.

Cultural Heritage

Cultural Heritage – All relevant representatives have been consulted &/or inspected Compartment 186.

Flora and Fauna

Species adequately covered by general prescriptions:

The following species have been recorded in or around the compartments and are adequately covered by the general prescriptions. No further protection measures are required for these species:

Common Bent-wing Bat (*Miniopterus schreibersii*), **Gang-gang Cockatoo** (*Callocephalon fimbriatum*), **Glossy Black-Cockatoo** (*Calyptorhynchus lathami*), **Grey-headed Flying Fox** (*Pteropus poliocephalus*), **Large-footed Myotis** (*Myotis adversus*), **Little Lorikeet** (*Glossopsitta pusilla*), and **Square-tailed Kite** (*Lophoictinia isura*).

Tree Retention

Zone	Hollow bearing Trees/ha	Recruitment Trees /ha	GG density >1/ha + Habitat/ha	Protection of Retained Trees	Dead Standing Trees (only if safe)	Significant Food Resource*
Regrowth	Up to 5	1 for every tree retained under 5.6d	+3	√	√	√
TSL condition	5.6d	5.6e	6.4d 6.10f	5.6h	5.6f	5.6 g

√ - Condition applies

3 Glossy black cockatoo feed trees occur within compartment 186 at locations shown in the table below.

Species	Feature	Zone	GDA Easting	GDA Northing	Comments
Glossy Black-Cockatoo	Feed tree	55	235694	6033037	Marked with pink tape
Glossy Black-Cockatoo	Feed tree	55	235692	6033016	Marked with pink tape
Glossy Black-Cockatoo	Feed tree	55	235970	6033637	Marked with pink tape

General exclusion zones

General exclusions as listed below are shown on the HPOM.

Feature/Condition	TSL cond'n	Occurs within Planning Unit
Rainforest	5.4	Has been assessed & is unlikely to occur in the field. May require further investigation#.
Riparian Protection Zones	5.7	Yes
Ridge & Headwater Habitat	5.8	Yes
Wetlands	5.9	Has been assessed & is unlikely to occur in the field. May require further investigation#.
Heath and Scrub	5.10	Has been assessed & is unlikely to occur in the field. May require further investigation#.
Rocky Outcrops and Cliffs	5.11	Has been assessed as a risk that it may occur in the field. May require further investigation#.
Endangered Ecological Community	NA	Has been assessed & is unlikely to occur in the field. May require further investigation#. Harvesting, harvesting machinery and post harvest burning must be excluded from all areas of EEC.

#FT/HC will continue to conduct on the ground mark-up & searches and report back to foresters/ecologists any features requiring further investigation.

General Threatened Flora and Fauna Prescriptions

Feature	Records in 186	Licence conditions under the TSC Act
Threatened Frog General Protection Measures	No	5.12
Bird Nest and Roost Site Protection	No	5.13
Tree Bat Roost Protection	No	5.14.1
Subterranean Roost Protection	No	5.14.2
Protection of flying-fox Camps	No	5.14.3
Burning	Net planned area	5.16
Ground Habitat Protection	Net planned area	5.17

Species & Site-Specific Threatened Flora and Fauna Prescriptions

The following species have been recorded within or nearby the area and the associated prescriptions must be implemented:

Threatened species and habitat features within trigger distance	Records in 186	Licence conditions under the TSC Act or relevant Site-specific prescription
Powerful Owl <i>Ninox strenua</i> , Masked Owl <i>Tyto novaehollandiae</i> .	Yes	6.4 <i>Owl Landscape Exclusion Zones occur in compartment 186</i>
Yellow-bellied Glider <i>Petaurus australis</i>	Yes	6.13

Fisheries Licence Conditions

There are no known records of threatened fish species or class 1 or 2 aquatic habitat relevant to this operation. The conditions of the fisheries licence are not triggered for this operation.

Soils and Water Protection**Refer to EPL Booklet & Standard Plan Conditions****Site-specific EPL Conditions**

Elements	Conditions
Unmapped Drainage Lines	EPL does not apply: refer to drainage feature protection below.
Drainage Feature Protection	See HPOM for widths
Inherent Hazard Class	1
Dispersible Soils	No
Seasonality Harvesting Exclusions	No
Seasonality Burning Exclusions	No
Log Dumps	Refer relevant conditions for IHL
Snig Tracks	Refer relevant conditions for IHL
Roads	See Schedule 5 of EPL Booklet
Slope limits for harvesting	Refer to Schedule 4B.3 of EPL

Drainage Feature Protection

Filter strips (EPL), Protection Zones (EPL), Operational Zones (EPL), Protection Zones -hard (TSL) and Protection Zones -soft (TSL) must be retained along all drainage lines, prescribed streams and watercourses within the net planned area of the compartments at minimum widths as stated in the Table below.

Table 1: Minimum filter strip, protection zone and operational zone widths for mapped and unmapped drainage lines, prescribed streams and watercourses in hardwood forests in Inherent Hazard Level 1 (metres – measured along the ground surface)

Stream Order	EPL Filter Strip TSL Protection (hard)	EPL Protection Zone TSL Protection* (soft)	EPL Operational Zone	Drainage Feature Protection: FT/HC marking instruction
Unmapped	N/A#	N/A#	N/A#	5m (Red)
1st order	5	5	10	10m (Pink)
2nd order	5	15	10	20m (Pink)
3rd order	5	25	10	30m (Pink)
4th order +	5	45	10	50m (Pink)

for this operation FCNSW has chosen to harvest this area without EPL coverage. All EPL conditions continue to apply **except** for the rules applying to filter strips, protection zones and operational zones of the **unmapped drainage lines**. Refer to Best Management Practices for unmapped drainage lines in the standard conditions. Harvesting of unmapped drainage lines, **MUST NOT** occur in unmapped drainage lines which are running or holding water. It is the responsibility of the HC to inspect each unmapped drainage line prior to harvesting it, to determine if it is running or holding water.

Log Dump Location

13 log dumps are indicated on the HPOM. Field location of log dumps must utilise the most level site available consistent with the location indicated on the HPOM. Inherent hazard level 1 Conditions 26, 27, 30, and 33 of Schedule 4 of the EPL must apply.

Drainage Feature Crossings

One snig track crossings (S1) and two road crossings (C1 and C2) are approved for use on drainage features (Refer to HPOM). Road crossing details are contained in Attachment 2 of this Plan. Snig track crossing details are provided below:

Crossing Name & Coordinates	Crossing details	Required Works
S1-new E 235300 N 6031800	Mapped 1 st order drainage line, occurs as a drainage line in the field. Natural Causeway crossing. Not class 1 or 2 Fisheries Licence aquatic habitat. Class 4 fish passage class: unlikely fish habitat.	Construct natural causeway crossing (expected side cut <0.5m) as per EPL. Construction should minimise disturbance and clearing and be at right angles to the flow unless an angled approach results in reduced disturbance. Armour depression with rock/gravel if required in wet conditions. Install cross banks/rollovers on completion of use within timeframes and spacing's specified in EPL.

Mass Movement

Compartment 186 is not in an area identified as having a potential for mass movement. No specific prescriptions relating to mass movement/snigging are required.

Suitability of existing log dams and gully stuffers

There are no known log dams or gully stuffers on snig track or road crossings in the compartments.

Condition 47 of Schedule 4 of the EPL must apply.

Post Log Burning Control Lines

To assist the post log burning crews prevent fire from entering areas to be excluded from burning, control line construction must be undertaken concurrently with harvesting. Where possible snig tracks patterns should be designed to double as control lines. Control lines must be located as close as reasonably practical to the feature to be excluded from burning. The HC must assess the areas harvested, snig track network and existing roads to determine if there are sufficient control lines in place and where required instruct the contractor to construct additional mineral earth control lines to supplement these. The HC must record instances where it was not possible to construct a suitable control line close to the feature to be excluded and recommend harvest areas which should be excluded from the post log burning operation due to inadequate control lines.

The table below lists critical boundaries in compartment 186. Where possible design snig track patterns so they double as bare earth containment lines as close as possible to these boundaries. Where this is not practical, it is NOT necessary to construct a bare earth break along boundary of the exclusion; the practice of no direct ignition will be followed.

Critical boundary	Completed Yes /No
FMZ 3A	
Probable Rock and Exclusion zone	
Owl Landscape	

Pre-Operational Briefing

I acknowledge that I have received a copy of the Harvesting Plan for Compartment 186 in Mogo State Forest and that I have been briefed on the conditions of the Plan and understand the supervision and operational control requirements as explained to me by the HS or his/her delegate.

Position	Name	Signature	Date

Post Harvest Mapping Features Confirmation Checklist

Feature	Planning Updates	Reason (Error/New)	GIS update tool completed?	Harvesting Updates	Comments
Soil Regolith	No				
Mapped Drainage	No				
Rainforest	No				
Rocky outcrops	No				
Wetlands	No				
Cultural Heritage	No				
Existing Roads	No				
New Roads	No				
Heath	No				
Powerlines etc	No				
Other					

HC/FT Notes

[illegible]

HC/FT Notes (continued)

[illegible]

HC/FT Notes (continued)	
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[illegible]

HC/FT Notes (continued)	
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[illegible]

HC/FT Notes (continued)

[illegible]

Clearance Certificate

COMPARTMENT: 186, MOGO STATE FOREST

ToHC

I request approval for me to move my logging crew and all associated machinery from the above-mentioned area to the next compartment in accordance with Section 3.5 of the Forest Practices Code.

I certify that:

- (a) all permanent roads, trails and mitre drains have been cleared of harvesting debris;
- (b) butt damage to retained trees has been kept to acceptable limits;
- (c) all trees marked for removal have been felled;
- (d) utilisation limits have been satisfactorily met;
- (e) stump heights conform to requirements;
- (f) all hanging trees have been felled and brought down;
- (g) all log dumpsites have been satisfactorily restored as required;
- (h) harvesting debris is not accumulated around retained trees;
- (i) all accumulated litter has been disposed of properly;
- (j) all filter and buffer strip requirements have been complied with;
- (k) all snig track, extraction track and temporary logging road drainage has been installed satisfactorily and other required rehabilitation work has been completed;
- (l) all necessary repairs to damaged roads, signs, fences and other structures have been carried out.
- (m) **_____ (insert quantity) rubber flaps have been recovered in a satisfactory condition and reported to Roading Coordinator for collection.**
- (n) all machinery, equipment and vehicles have been checked and are free of noxious weeds, diseases and pests.

I believe that I have met all my obligations under the conditions of the Contractors Licence, the EPL and TSL which apply to the compartment just completed, as stated in this Harvesting Plan.

Signature.....Name.....Date
Contractor

As a result of inspections of the logging operations made in accordance with this Harvesting Plan, I am satisfied that, to the best of my knowledge, the contractor responsible for this harvesting operation has satisfactorily completed all work and approval is given for her/him to remove her/his machinery and equipment and leave the area/commence operations in another compartment.

This clearance does not release the contractor from any obligation to undertake any remedial work if subsequent deficiencies are shown to result from inadequate practices during the harvesting operation, which are found during any inspections of the area made within 12 months of the date of this post-harvesting inspection.

Last inspection was made on(Date)

Signed(Date).....
HC

Post Logging Information

Record any circumstances of significance relating to the harvesting of this compartment. Please draw or include any annotations on the attached operation scale map.

Summary of silvicultural treatment

Treatment type	Area (ha) subject to treatment (HC estimate)	Number of AGS gaps created	Comments
Australian Group Selection			
Single Tree Selection			
Thinning/Spacing			
Post Harvest Silviculture			

Actual area harvested (record on attached HPOM) Give reasons for harvestable areas that were not harvested (eg. Too steep, defective timber). Make reference to map.

Post Logging Basal Area sweeps

Sample point	GPS (GDA 94)	Pre-harvest (B) BA m ² /ha	Post-harvest(A) BA m ² /ha	Difference (D) (B – A) m ² /ha	% BA removed D/B x100	Comments
1	E235793 N6031875	32				
2	E235209 N6032069	24				
3	E235962 N6033071	26				
4	E235278 N6031762	30				
5	E235990 N6032407	22				
6	E235414 N6033301	24				
7	E235826 N6033529	32				
8	E234918 N6032497	22				
9	E235698 N6032167	24				
10	E235541 N6032886	28				
11	E235384 N6032576	30				
Average		27				

Comply with maximum STS BA removal of 45% Y/N

Possible next cut (tick appropriate boxes)

Main product type	Anticipated volume		
	H	M	L
Girders			
Veneer			
Poles/piles			
Quota			
Smalls/Thinnings			
Salvage			
Pulpwood/chipwood			

Time to next harvest	
0 to 5 years	
5 to 10 years	
10 to 20 years	
20 to 30 years	
30 plus years	

ATTACHMENT 2	ROADING PLAN
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Summary of Roding Requirements

Feature	Details	Works Required
Existing roads to be used.	6350m / 6	Yes
New roads to be constructed	0m/0	NA
Existing crossings used	2	Yes
New crossings to be constructed	0	NA
Length of road >10°	0m	NA
Borrow pits and gravel pits	0	NA
Mass movement prescriptions apply	No	NA
Dispersible soil conditions apply	No	NA
Seasonality provisions apply	No	NA

Note: Maintenance works not completed by Roding Coordinator must be recorded and passed onto the HC for completion during harvesting and documentation.

The start and finish dates of all maintenance and construction must be recorded on the individual roading sheets along with other relevant changes or explanations.

All rubber flaps on minor forest roads must be removed and replaced with trafficable rollover banks on completion of operation.

CHECKLIST OF WORKS REQUIRED ON ROADS & CROSSINGS

Road/Crossing Name	Works Required	Date Started	Date finished	Signature
C1	Install 100mm rock in stream bed and 60mm aggregate on banks. Install rubber flap at between 5 and 30m from bank on the eastern side of crossing. Install new mitre at approximately 20m from the bank on the north side of the road on the western approach. Maintain existing mitre at 20m from stream bank on southern side of road on western approach. RC/HC Comments:			
C2	Install 100mm rock in stream bed and 60mm aggregate on banks. Install rubber flap at between 5 and 30m from bank on both sides of crossing. RC/HC Comments:			
Maulbrooks Road	Reshape road and maintain existing drainage structures. Install new drains as required and to meet EPL specification. Spacing of drainage on this road was not assessed by the planner. RC/HC Comments:			
Cpt 186/1 Road	Reshape road and maintain existing drainage structures. Install new drains as required and to meet EPL specification. Spacing of drainage on this road was not assessed by the planner. RC/HC Comments:			
Cpt 186/2 Road	Reshape road and maintain existing drainage structures. Install new drains as required and to meet EPL specification. Spacing of drainage on this road was not assessed by the planner. RC/HC Comments:			
Cpt 186/3 Road	Reshape road and maintain existing drainage structures. Install new drains as required and to meet EPL specification. Spacing of drainage on this road was not assessed by the planner. RC/HC Comments:			

Cpt 186/4 Road	Reshape road and maintain existing drainage structures. Install new drains as required and to meet EPL specification. Spacing of drainage on this road was not assessed by the planner. RC/HC Comments:			
Sandy Pinch Road	Reshape road and maintain existing drainage structures. Install new drains as required and to meet EPL specification. Spacing of drainage on this road was not assessed by the planner. RC/HC Comments:			